

Remarks

The non-final Office Action dated October 20, 2008, notes that newly submitted claims 14-19 are directed to an invention that is independent or distinct from the invention originally claimed and thus, these claims are being withdrawn from consideration. The following objection and rejection are shown: the drawings are objected to under 37 CFR 1.83(a); and claims 1-13 stand rejected under 35 U.S.C. § 102(b) over Munari *et al.* (“A Test Pattern for Three-Dimensional Latch-up Analysis”). In this discussion set forth below, Applicant does not acquiesce to any rejection or averment in this Office Action unless Applicant expressly indicates otherwise.

Applicant respectfully traverses the restriction and withdrawal of claims 14-19 because these claims are not independent of and distinct from claims 1-13. First, the Office Action erroneously applies the stand of “independent or distinct” as the basis for the restriction and withdrawal of claims 14-19; newly added claims 14-19 must be both independent of and distinct from the original claims in order for restriction to be proper. *See, e.g.*, M.P.E.P. § 821.03 (“If, after an office action on an application, the applicant presents claims directed to an invention distinct from and independent of the invention previously claimed, the applicant will be required to restrict the claims to the invention previously claimed if the amendment is entered”). As such, the restriction and withdrawal of claims 14-19 is improper and cannot be maintained.

Moreover, the Office Action fails to present the required analysis showing how claims 14-19 are independent of and distinct from claims 1-13. Specifically, the Office Action simply concludes that claims 14-19 are independent or distinct without providing reasoning to support this conclusion as required. *See, e.g.*, M.P.E.P. § 808.01 (“The particular reasons relied on by the examiner for holding that the inventions as claimed are either independent or distinct should be concisely stated. A mere statement of conclusion is inadequate. The reasons upon which the conclusion is based should be given.”). In this instance, the Office Action improperly concludes that species 14-19 are independent or distinct based on the assertion that these claims contain limitations directed to a plurality of test points connect in parallel¹, which were not examined prior to the first action. The

¹Applicant notes that similar aspects can be found in claims 1-13, for example, a plurality of test blocks connected in parallel as recited in claim 1.

Office Action, however, has not provided any analysis regarding how or why the Office Action has concluded that claims 11-14 are independent from claims 1-13 (*i.e.*, that they are unconnected in design, operation, and effect). *See, e.g.*, M.P.E.P. § 802.01.

Applicant submits that claims are not independent or distinct simply because they include aspects that are not present in other claims. According to M.P.E.P. § 806.05(j), related inventions are “distinct if (A) the inventions *as claimed* do not overlap in scope, *i.e.*, are mutually exclusive; (B) the inventions *as claimed* are not obvious variants; and (C) the inventions *as claimed* are either not capable of use together or can have a materially different design, mode of operation, function, or effect.” In this instance, the Office Action has not provided any indication that claims 14-19 and 1-13 recite mutually exclusive characteristics and that they are not capable of use together or that they can have a materially different design, mode of operation, function, or effect as is required to show that these claims are distinct. In addition, M.P.E.P. § 806.05(j) further requires that “reasons for insisting on restriction are necessary, *i.e.*, separate classification, status in the art, or field of search.” However, no such reasons have been provided by the Office Action.

In view of the above, the restriction and withdrawal of claims 14-19 is improper. Accordingly, Applicant requests that claims 14-19 be examined.

Applicant respectfully traverses the objection to the drawings because a heater (*see, e.g.*, claims 6 and 7) is shown in Applicant’s drawings. For example, Fig. 9 shows polysilicon rings 20, which acts as heaters as is discussed in paragraph 0039 of Applicant’s specification. Thus, the objection to the drawings is improper and Applicant requests that it be withdrawn.

Applicant respectfully traverses the § 102(b) rejection of claims 1-13 because the cited portions of the Munari reference do not correspond to numerous aspects of the claimed invention as was discussed in detail in the Response dated July 10, 2008, hereby incorporated by reference in its entirety. The Examiner, in the instant Office Action, has improperly maintained the rejection of claims 1-13 without responding to the substance of Applicant’s previous arguments as required. *See, e.g.*, M.P.E.P. § 707.07(f) (“Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant’s argument and answer the substance of it”). In this

instance, the Examiner simply repeats the rejection based on the Munari reference (the only change being a single additional cite to various figures) without addressing Applicant's prior arguments as required. As such, the only evidence of record indicates that the cited portions of the Munari reference are not arranged as required by the claimed invention. *See, e.g.*, M.P.E.P. § 2131. Further, the Examiner fails to even address certain aspects of the claimed invention as was previously brought to the Examiner's attention by Applicant. Accordingly, the § 102(b) rejection of claims 1-13 is improper and cannot be maintained. The following discussion particularly addresses the lack of correspondence between the cited portions of the Munari reference and the claimed invention.

Applicant traverses the § 102(b) rejection of claims 1-13 because the cited portions of the Munari reference do correspond to aspects of the claimed invention directed to a plurality of sensor blocks that are located at successively increasing distances from the respective injector block. The cited portions of Munari do not mention that the parasitic devices discussed in col. 1 of page 104 (*i.e.*, the Examiner's alleged sensor blocks) are located at successively increasing distances from the respective injecting devices discussed in the first paragraph of col. 1 on page 107 (*i.e.*, the Examiner's alleged injector blocks). As such, the cited portions of Munari do not correspond to the claimed invention. Accordingly, the § 102(b) rejection of claims 1-13 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 102(b) rejection of claims 1-13 because the cited portions of the Munari reference are not arranged as required by the claimed invention. According to M.P.E.P. § 2131, the elements of a prior art reference must be arranged as required by a claim in order to anticipate the claim.

As a first example (regarding claims 1-13), the claimed invention requires that each of the plurality of test blocks includes an injector block. The cited portions of the Munari reference, however, do not teach that Munari's injecting device (*i.e.*, the Examiner's alleged injector blocks) is part of the source-measurement units (*i.e.*, the Examiner's alleged test blocks) of HP-4145B semiconductor parameter analyzer. *See, e.g.*, page 106, col. 2, last paragraph and page 107, col. 1, first paragraph. Specifically, Munari teaches that the injecting device (*e.g.*, a pnp transistor) injects current to trigger latch-up of the triggering device (*e.g.*, a npn transistor) (*i.e.*, the injecting device and the

latch-up of the triggering device (*e.g.*, a npn transistor) (*i.e.*, the injecting device and the triggering device form the parasitic device that is being tested). *See, e.g.*, page 107, col. 1, first paragraph and page 107, col. 2, second full paragraph. Thus, Munari's injecting device (*i.e.*, the Examiner's alleged injector block) is not part of the source-measurement units of the HP analyzer (*i.e.*, the Examiner's alleged test blocks); as such, the cited portions of the Munari reference are not arranged as required by the claimed invention.

As a second example (regarding claims 1-13), the claimed invention includes a plurality of sensor blocks located at successively increasing distances from the respective injector block, with each sensor block including a PNPN latch-up test structure. The Examiner asserts that Munari's parasitic device (*see, e.g.*, page 104, col. 1) corresponds to the claimed sensor blocks. The cited portions of Munari, however, teach that the injecting device (*i.e.*, the Examiner's alleged injector block) is part of the parasitic device being tested as discussed above. *See, e.g.*, page 107, col. 1, first paragraph and page 107, col. 2, second full paragraph. Thus, the cited portions of Munari do not teach an injector block and a separate sensor block (including a PNPN latch-up test structure) as required by the claimed invention. As such, the cited portions of the Munari reference are not arranged as required by the claimed invention.

As a third example (regarding claims 1-13), the claimed invention requires that the plurality of test blocks are connected in parallel. The cited portions of Munari, however, do not mention that source-measurement units of HP-4145B semiconductor parameter analyzer (*i.e.*, the Examiner's alleged test blocks) are connected in parallel. In the instant Office Action, the Examiner further cites to Figures 2, 3, 6 and 7 in an apparent attempt to address the parallel connection aspects of the claimed invention; however, these Figures do not appear to show the source-measurement units of the HP-analyzer but instead show test patterns. As such, Applicant submits that Figures 2, 3, 6 and 7 do not provide any support for the Examiner's apparent assertion that the source-measurement units of the HP-analyzer are arranged in parallel. As such, the cited portions of the Munari reference do not correspond to the claimed invention.

In view of the above, the cited portions of the Munari reference fail to correspond to numerous aspects of the claimed invention. Accordingly, the § 102(b) rejection of claims 1-13 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 102(b) rejection of claims 3 and 4 because the cited portions of Munari do not correspond to aspects of the claimed invention directed to the injector blocks being connected between first and second supply lines (claim 3), and the sensor blocks being connected between third and fourth supply lines that are different from the first and second supply lines (claim 4). The Examiner simply cites to several columns of the Munari reference without indentifying what elements of Munari correspond to the claimed supply lines (*e.g.*, page 104, col. 2; page 105, col. 1; page 106, col. 2; and page 107, col. 1). Applicant has reviewed these portions of Munari; however, these portions do not mention injector blocks and sensor blocks connected between different supply lines as in the claimed invention. Accordingly, the § 102(b) rejection of claims 3 and 4 is improper and Applicant requests that it be withdrawn. Applicant previously requested that the Examiner specifically identify where and how Munari provides support for the Examiner's assertion of correspondence to the various aspects of claims 3 and 4, to which the Examiner failed to respond in any manner. *See, e.g.*, M.P.E.P. § 706.07 ("The examiner should never lose sight of the fact that in every case the applicant is entitled to a full and fair hearing, and that a clear issue between applicant and examiner should be developed, if possible, before appeal.").

Applicant further traverses the § 102(b) rejection of claim 9 because the cited portions of Munari do not correspond to aspects of the claimed invention directed to disconnecting the sensor blocks during application of the stress current (or voltage) to the injector blocks. Applicant notes that the Examiner simply cites to several pages of Munari (*i.e.*, pages 105-107) without providing any indication regarding how these pages support the Examiner's assertion that Munari teaches these aspects of the claimed invention. As discussed above, the cited portions of Munari teach that the injecting device (*e.g.*, a pnp transistor) injects current to trigger latch-up of the triggering device (*e.g.*, a npn transistor). *See, e.g.*, page 107, col. 1, first paragraph and page 107, col. 2, second full paragraph. Applicant submits that the cited portions of Munari do not teach disconnecting the injecting device in any manner during application of the current to the triggering device. Accordingly, the § 102(b) rejection of claim 9 is improper and Applicant requests that it be withdrawn. Applicant also previously requested that the Examiner specifically identify where and how Munari provides support for the

Examiner's assertion of correspondence to the various aspects of claim 9, to which the Examiner once again failed to respond in any manner.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

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